

## CLAIMS

What is claimed is:

1. A server crash recovery reboot auto activation method for use on a network server for automatically activate the network server to undergo a reboot procedure in the event of  
5 a system crash to the network server;

the server crash recovery reboot auto activation method comprising:

responding to the current operating condition of the network server at predefined intervals to thereby generate a normal-operation indicative message if the network server operates normally, and generate no normal-operation indicative message if the network  
10 server fails to operate normally;

at each presence of one normal-operation indicative message, start a timing procedure to count time for a predefined timeout length, and then at the presence of the next normal-operation indicative message, resetting the current time count to origin; and in the event of no presence of normal-operation indicative message during the elapsed period of  
15 the predefined timeout length, generating a System Management Interrupt signal; and

in response to the System Management Interrupt signal, activating a BIOS-based reboot procedure to thereby reboot the network server.

2. The server crash recovery reboot auto activation method of claim 1, wherein the timing procedure is performed by a watchdog timer in an I/O control chip installed on the  
20 network server.

3. The server crash recovery reboot auto activation method of claim 2, wherein the I/O control chip is a Super I/O chip.

4. The server crash recovery reboot auto activation method of claim 2, wherein the I/O control chip is a Southbridge chip.

5. A server crash recovery reboot auto activation system for use with a network server for automatically activate the network server to undergo a reboot procedure in the event of

5 a system crash to the network server;

the server crash recovery reboot auto activation system comprising:

a system crash responding module, which is capable of responding to the current operating condition of the network server at predefined intervals to thereby generate a normal-operation indicative message if the network server operates normally, and generate

10 no normal-operation indicative message if the network server fails to operate normally;

a watchdog timer, which is capable of being activated in response to the presence of each normal-operation indicative message from the system crash responding module to start counting time from an original count for a predefined timeout length, and capable of being reset to original count at the presence of the next normal-operation indicative  
15 message from the system crash responding module, and which is capable of generating a system crash indicative System Management Interrupt signal when reaching timeout in the event of no normal-operation indicative message being received during the elapsed period of the predefined timeout length; and

a System Management Interrupt handling module, which is capable of being  
20 activated in response to the System Management Interrupt signal from the watchdog timer to initiate a System Management Interrupt judgment procedure to judge whether the System Management Interrupt signal is issued from the watchdog timer; if YES, the

System Management Interrupt handling module activating a BIOS-based reboot procedure to thereby reboot the network server.

6. The server crash recovery reboot auto activation system of claim 5, wherein the watchdog timer is a built-in functional module in an I/O control chip installed on the  
5 network server.

7. The server crash recovery reboot auto activation system of claim 6, wherein the I/O control chip is a Super I/O chip.

8. The server crash recovery reboot auto activation system of claim 6, wherein the I/O control chip is a Southbridge chip.

10 9. The server crash recovery reboot auto activation system of claim 5, wherein the System Management Interrupt handling module is a built-in functional module in an I/O control chip installed on the network server.

10. The server crash recovery reboot auto activation system of claim 5, wherein the System Management Interrupt judgment procedure is a built-in procedure in the BIOS of  
15 the network server.

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